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**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Develop an  
Electricity Integrated Resource Planning  
Framework and to Coordinate and Refine  
Long-Term Procurement Planning  
Requirements.

Rulemaking 16-02-007  
(Filed February 11, 2016)

**SUBMISSION OF FINAL REPORT OF THE GRID  
INTEGRATION FLEXIBILITY METRICS AND  
STANDARDS PROJECT**

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Dated: September 12, 2017

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The California Energy System for the 21st Century (CES-21) Program is a collaborative research and development effort between the three California investor owned utilities – Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) – and the Lawrence Livermore National Laboratory (LLNL). The CES-21 Program was approved by the California Public Utilities Commission on October 2, 2014 by Resolution E-4677. As part of the CES-21 Program, the Grid Integration Flexibility Metrics and Standards project (Project) was conceived to examine the flexibility needs of the California Independent System Operator System, and to recommend, if appropriate, generation planning metrics and standards that explicitly consider the operating flexibility needs of the electric system.

Per Ordering Paragraph 3e of Resolution E-4677, the parties to the Project (PG&E, SDG&E, LLNL, Electric Power Research Institute and Astrape Consulting) were ordered to publish a final report with findings and recommendations and make the report publicly available to all parties through the Long-Term Procurement Planning proceeding. Attachment A to this pleading contains the required final report, entitled “Role of Operating Flexibility in Planning Studies.”

Respectfully submitted,

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# **ATTACHMENT A**